

## Patent Abstracts of Japan

PUBLICATION NUMBER : 06188501  
 PUBLICATION DATE : 08-07-94

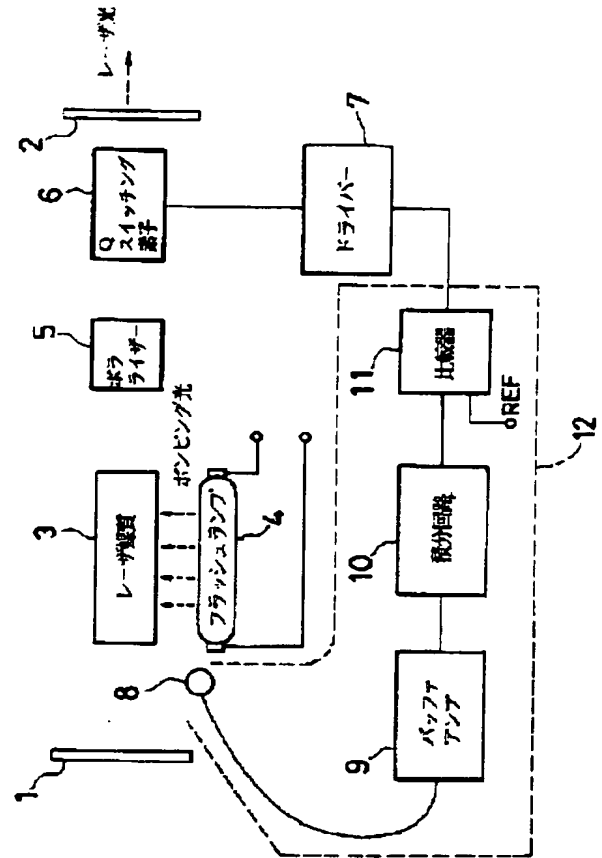
APPLICATION DATE : 11-12-91  
 APPLICATION NUMBER : 03327623

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INT.CL. : H01S 3/11

TITLE : Q SWITCH LASER UNIT



ABSTRACT : PURPOSE: To allow Q switching under better conditions regardless of fluctuation of pumping means by driving a Q switching element when pumping energy of laser medium reaches a predetermined level.

CONSTITUTION: In a timing detecting means 12, an optical sensor 8 detects the waveform of light emitted from a flash lamp 4. The waveform thus detected is then amplified through a buffer amplifier 9 and integrated through an integrating circuit 10 before it is applied to a comparator 11. The comparator 11 delivers a driving signal to a driver 7 when the level of light emitted from the flash lamp 4 reaches a threshold value. A timing detecting means 12 detects the time when the pumping energy being applied from the flash lamp 4 to a laser medium 3 reaches a predetermined level and drives a Q switch element 6 through the driver 7 at that detection timing thus satisfying conditions of resonator. This constitution allows Q switching under better conditions regardless of aging in the pumping state through the flash lamp.

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